Notebook Series -- Notebooks by Edison
Notebook, N-18-12-26.1

This notebook was used by Edison in December 1918. Included are notes summarizing experiments with various CuO electrode plates and giving cursory descriptions of experimental cells numbered from 13 to 16. The front cover is labeled "Dec 26 19/18 Copper Battery." The pages are unnumbered. Only seven pages have been used.

Dec 26 Noon

So far CuO Thru 180 mesh is best it shrinks 58/1000 in 2.287 dia which is more than coarse CuO as they use it for plates at the factory This only shrinks 5/1000 in - 2.287 dia disc.

4 grams of Lead glass thru 200 mesh is OK it should not be coarser as that would require more glass to give the same strength The addition of 250 Milligrams of dried Soda + 5 cc H_2O (Caustic) to the 4 grams of glass makes it more fusible and permits of baking at a lower heat, a little brighter than Orange is OK see Nos 7 8 9 cell records

Also as shown by No 12 Cell Ordinary bottle soda glass Can be used, 4 glass 200 mesh 5 cc Water 250 milg dry soda But baked at Bright Yellow is OK but it hasn't the Bake Margin of Lead glass

Dia of Mould 2.287

Dia 4 discs Deke #13

	Thickness
2.214	446
2.230	448
2.229	448
2.238	451

Shrunk 58/1000 in 2".287

Probable Cause of great shrinkage: temp so high glass either melted or got too soft —

Battery 13.

100 CuO, through 180 mesh,
4 grms Lead glass, 250 mlg
dry soda 5 cc water.
Baked to full yellow rather bright
Cake shrunk 58/1000 -
probably because it was heated
a little higher than 7 & 9
of old book — This is a
caution not to go too high as
a point is reached where there
is a sudden & great shrinkage.
The holder should be constructed
to take care of this — otherwise
thermometers needs have to
be carefully watched —
if baked lots low temp plates
will not be so strong

This cell is to be discharged at
600 Milamp rate at ordinary
temp, ondischg 11 30 am —
Dec 26th —

#14 – Dup of 13 –

#14 – Dupe of 13
Did same time

#15 Dup of 13 but
run at 200 Milamp in
ice chest
on Dec 26 11 am

#16 Dup of 13
but discharged at 600 Mula
in Ice chest
One Dec 26 11 am